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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,692	-07/02/2003	Vipin Malik	1787-13700 (M&C020002)	4403
23505	7590	11/07/2005	EXAMINER	
CONLEY ROSE, P.C.			TAN, VIBOL	
P. O. BOX 3267			ART UNIT	
HOUSTON, TX 77253-3267			PAPER NUMBER	
			2819	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,692	Applicant(s) MALIK ET AL.	
	Examiner Vibol Tan	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/2/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *command signal, acoustic transducer and fluid flow* must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6, 7, 9, 17 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. *There is no written description of a command signal and the programmable logic device fires acoustic transducer and gathers sensor measurements to determine characteristic of a fluid flow, in the specification.*

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 8, 10-16 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Coutts-Martin et al. (U. S. PAT. 6,031,391).

In claims 1 and 5, Coutts-Martin et al. teaches all claimed features in Figs. 2 and 3, a remote sensing device that comprises: a programmable logic device (210 or 310) that receives a configuration signal (via data bus 220 or 330); and a switch (control bus 224; col. 3, line 63) configurable to pass a communication signal to the programmable logic device as the configuration signal, wherein the switch (224) is configured to

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automatically block (224 controls when 210 completes its operations; col. 4, line 1) the configuration signal after the programmable logic device has been configured; and wherein the programmable logic device (210 or 310) is a field programmable gate array (PLD is a FPGA and vice or versa).

In claim 2, Coutts-Martin et al. further teaches the device of claim 1, wherein the switch (224) is at least partially controlled by a signal (310 drives a chip select line nCS low; col. 4, line 30) provided by the programmable logic device to indicate when the programmable logic device has been configured.

In claim 3, Coutts-Martin et al. teaches the device of claim 1 in Fig. 5 further comprising: a second programmable logic device (530) configured to receive a configuration signal (data); and a second switch (NCEO; col. 7, line 63) configurable (low) to pass the communication signal to the programmable logic device as a configuration signal (530 may begin accepting data; col. 7, line 65), wherein the second switch is configured to automatically block the configuration signal after the second programmable logic device has been configured (Conf_Done).

In claim 4, Coutts-Martin et al. teaches the device of claim 4, wherein the second switch is further configured to block the configuration signal to the second programmable logic device until after the first programmable logic device has been configured (col. 7, lines 54-56; when first programmable device 520 is fully configured, then the second programmable device 530 begins accepting data).

In claim 8, Coutts-Martin et al. teaches the device of claim 1 wherein after the programmable logic device has been configured, the programmable logic device

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communicates with main device (CPU) using a programmed communications protocol (JTAG; col. 4, line 8).

Claim 10, Coutts-Martin et al. teaches all claimed features in Figs. 2 and 3, a method of operating a remote device (Fig. 2 or 3), the method comprising: providing a path (220, 222) for a communication signal to one or more configuration terminals (DCLK, DATA) of a programmable logic device (210 or 310) in the remote device; and automatically opening the path (controlled by 224) in the remote device after the programmable logic device is configured (Conf-Done).

In claim 11, Coutts-Martin et al. further teaches the method of claim 10, further comprising: re-establishing the path only if the remote device is powered down or reset (control logic 630 resets when sees error, Fig. 6).

In claim 12, Coutts-Martin et al. further teaches the method of claim 10, further comprising: re-establishing the path upon receiving a predetermined configuration command (ERROR signal, Fig. 6).

In claims 13 and 14, Coutts-Martin et al. further teaches the method of claim 10, further comprising: transporting the communication signal via a second path (a path includes DCLK and DATA coupling to PLD 530 in Fig. 5) to one or more communication terminals (DCLK and DATA) of the programmable logic device; wherein the second path is established only after the programmable logic device is configured (Conf_Done from PLD 520).

In claims 15 and 16, Coutts-Martin et al. further teaches the method of claim 10, providing a second path (a path includes DCLK and DATA coupling to PLD 530 in Fig.

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5) for the communication signal to one or more configuration terminals (DCLK and DATA) of a second programmable logic device (530) in the remote device; and automatically (530 may begin accepting data; col. 7, line 65) opening the second path in the remote device after the second programmable logic device is configured (Conf_Done); and wherein the second path is established only after the first programmable logic device is configured (Done).

Claims 18-22 correspond to detailed circuitry already discussed similarly with regard to claims 1-5 and 8.

Claims 18-22 also correspond to detailed circuitry already discussed similarly with regard to method claims 10-16.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Vibol Tan', with a stylized flourish at the end.

VIBOL TAN
PRIMARY EXAMINER